

Appl. No. 09/623,643
Amendment and/or Response
Reply to Office action of 7 March 2005

Page 2 of 6

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-3. (Canceled)

4. (Previously presented) A mobile data carrier comprising:

a data-processing circuit that includes asynchronously operating logic elements whose signal-processing rate is dependent on a power supply voltage applied to the data-processing circuit,

a voltage regulator, operably coupled in parallel with the data-processing circuit, that is configured to control the power supply voltage applied to the data-processing circuit, and

a current source, operably coupled in series between the data-processing circuit and a power source, that is configured to provide a supply current to the data-processing circuit and the voltage regulator.

5-6. (Canceled)

7. (Previously presented) The mobile data carrier of claim 4, wherein

the current source is configured to provide a current that is substantially controlled by the power source.

Appl. No. 09/623,643
Amendment and/or Response
Reply to Office action of 7 March 2005

Page 3 of 6

8. (Previously presented) A mobile data carrier comprising:

a data-processing circuit that includes asynchronously operating logic elements whose signal-processing rate is dependent on a power supply voltage applied to the data-processing circuit,

a voltage regulator, operably coupled in parallel with the data-processing circuit, that is configured to control the power supply voltage applied to the data-processing circuit, and

a current source, operably coupled in series between the data-processing circuit and a power source, that is configured to provide a supply current to the data-processing circuit and the voltage regulator, wherein

the current source includes:

a first transistor that includes:

a gate that is connected to a first node of the power source,

a drain through which a first current flows, and

a source that is connected to a second node of the power

source; and

a current mirror that is configured to provide a multiple of the first current as the supply current.

9. (Previously presented) The mobile data carrier of claim 8, wherein

the current mirror includes a second transistor and a third transistor having commonly connected gates.

10. (Previously presented) The mobile data carrier of claim 4, wherein

the current source is configured to provide a current that is controlled by the power source.